

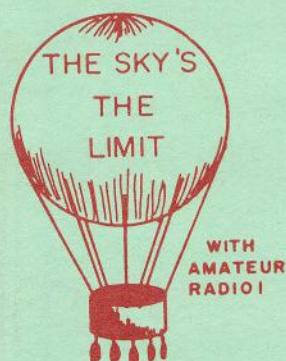
ANCHORAGE AMATEUR RADIO CLUB

PRESIDENT- LANCE DUNBAR-AL7BK-337-6297

CLUB PHONE:345-0719

DEC. 1985

«EVENTS»



Dec. 6, 1985 AARC Annual Xmas Party/Meeting 6:00 p.m.
Details inside.

Dec. 11, 1985 AARC Board Meeting - 7:00 p.m. - Hope Cottage
Bering Street between N. Lights and Benson.

Dec. 28, 1985 P.A.R.K.A. - Time & Place T.B.A.

V. E. C. Testing - Please call Roger Hansen KL7HFQ for details.
Home phone is: 243-2221

CONGRATULATIONS!

ANCHORAGE

BERNIECE CULBERTSON
EDWARD YOUNG
WILLIAM WALTERS III
JAMES BIGGER
GARY RIGDON
RONALD BAAS

(NEW CALL!)

CALL SIGN

WL7AMQ
NL7FU
NL7GH
WL7BGP

FROM

NOVICE
TECHNICIAN

NO LIC.
GENERAL
NOVICE

TO

TECHNICIAN
GENERAL
NOVICE
GENERAL
ADVANCED
TECHNICIAN



FAIRBANKS

JAMES HENSLEY
AQUILA BAKER
WALTER LINDLEY
NORMAN WESTDAHL



KA5GBH
WL7BFX

TECHNICIAN
GENERAL
NO LIC.
NO LIC.

GENERAL
ADVANCED
TECHNICIAN
NOVICE

JUNEAU

DOUGLAS ALSIP
FRANK HALL

NL7DT
NL7GK

TECHNICIAN
GENERAL

ADVANCED
AMATEUR EXTRA

(submitted by Roger Hansen; KL7HFQ, VEC Director.)

EDITOR: BONNIE JENNINGS-NL7DF 243-1146
8035 LLOYD DR
ANCHORAGE, ALASKA 99502

QSTREE  QSTREE 

xmas party potluck



* 6:00 PM * DEC. 6 * VIKING HALL

* 8141 BRIARWOOD - OFF DIMOND

* BETWEEN O.S.H. & NEW SEWARD

MUSIC! - FOOD! - ENTERTAINMENT! - FOOD! - FUN! - FOOD! - SURPRISES! - FOOD!

DOOR PRIZES!

ADMISSION \$3.00 (AGE 12 & OVER)

EXTRA DOOR PRIZE TICKETS:

\$2.00 EACH OR 2/\$5.00

FOR THE POTLUCK:

NOVICE & EXTRA: PICKLES,
OLIVES, ROLLS, BUTTER

TECHNICIANS: SALADS & JELLO

GENERAL CLASS: HOT DISHES

ADVANCED: DESSERTS



LET'S PARTY!

TURKEYS & HAMS PROVIDED BY CLUB.

COOKS ARE NEEDED. ALL HELP IS
GREATLY APPRECIATED & ACCEPTED.

CALL MARY, NL7DM, 344-5146.



SUSITNA REPEATER

BY KL7EM

THIS YEAR HAS TAKEN A DREAM AND TRANSFORMED IT INTO A NEAR COMPLETE PROJECT. IT'S HARD TO SAY HOW MANY PEOPLE HAS HELPED PUT THE PROJECT TOGETHER. IT HASN'T BEEN ALL HAMS EATHER. I'VE HAD HELP FROM A LOT OF GOVERNMENT AGENCIES: BLM, ALASCOM, THE ARMY NATIONAL GUARD. THE GUARD HAS GIVEN TWO FLIGHTS TO THE MOUNTAIN. ONE TO SURVEY THE SITE, THE OTHER TO INSTALL THE SOLAR PANELS. THE PANELS DIDN'T MAKE IT DUE TO BAD VISIBILITY, BUT THATS ALRIGHT TOO. IT GAVE ME THE OPERTUNITY TO RECONSIDER AND MAKE IT A SPRING INSTALLATION THAT WAY I COULD HAVE A GOOD LONG BREAK IN PERIOD. I'LL BREAK THE STAGES OF THE REPEATER DOWN AND DISCUSS EACH. THE COMPONENTS OF THIS REMOTE CONTROLLED REPEATER ARE: THE RECIEVER, TRANSMITTER (2METER), ID'ER/CONTROLLER, 440 CONTROLLER, DUPLEXER, SOLAR PANELS, VOLTAGE REGULATOR, BATTERIES, AND ANTENNA ON 440 AND 2M. I'VE GOT THE RCVR, XMTR, AND CONTROLLER MATED TOGETHER AND OPERATIONAL AFTER PUTTING IT IN SEVERAL DIFFERENT CONTAINERS BEFORE IT'S FINAL PACKAGE WAS COMPLETED THANKS TO DOUG KL7IKX. DOUG HAS BEEN AN INVALUABLE AID TO THE PROJECT IS AN UNDERSTATEMENT. IN TESTING THE REPEATER FOR CURRENT DRAIN, THE XMTR DRAWS 750MA AND THE RECIEVER DRAWS 250MA. THE REPEATER STILL NEEDS THE 440 CONTROLLER. DOUG HAS BEEN WORKING ON THAT SIDE OF THE PROJECT. ALL WE NEED THERE IS TO MATE THE 440 RCVR WITH THE AUDIO TO RELAY OR LATCHING RELAY. THE DUPLEXERS ARE ALMOST COMPLETED. THEY NEED A COUPLE MORE VARIABLE CAPS PUT IN SERIES WITH THE COILS. AL ANDRES HAS HELPED ME A LOT IN TUNING THEM. GARY NL7GH HAS HELPED WITH THE ANTENNA BY REBUILDING IT AND TUNING IT. HE HAS HELPED BY TESTING THE BATTERIES AND PUTTING THE SOLAR PANELS TOGETHER. KL7EB JUST UP AND DONATED \$100 FOR A GOOD MARINE BATTERY. WE CAN USE ANOTHER ONE OR TWO IF ANYONE IS UP FOR DONATIONS. THE TIME IS NEARING FOR AN INTEGRATION OF THE SYSTEM. WE COULD USE SOME HELP IN FINDING A TEMPORARY SITE TO PUT THE RPTR AND SOME HELP ASSEMBLING THE SOLAR PANELS. ITS EASY, IT JUST TAKES A LOT OF WRENCH TWISTING. REMEMBER WE STILL NEED MORE DONATIONS AND LOTS OF IDEAS. ANYONE GOT AN IDEA OF HOW WE CAN GET A WIND GENERATOR SO WE CAN RUN MORE POWER OR WHERE WE CAN GET MORE SOLAR PANELS? WELL WIS ME LUCK. 73'S AND 88'S.

GOD BLESS,
RUSS SCOTT

ANCHORAGE AMATEUR RADIO CLUB, INC.
Minutes of general club meeting, November 1, 1985
Lucy Cuddy Center, Anchorage Community College Campus

The meeting was called to order at 1915L by President Lance Dunbar AL7BK. Introductions were held; there were 43 people present.

Lance opened the proceedings by saying that Steve Tolley KL7FZ could not be present to present the evening's program -- telling us how he moved a large satellite dish from Homer to Big Lake -- due to the cold weather and him having to get some heat into his building. Plan B was implemented in the form of a talk by Jack Cervantes of the Anchorage Fire Department on the new Municipal Emergency Operations QTH.

Lance told us that Al Andrus KL7EF's XYL was in the intensive care unit at Providence. Martha Neeley KL7QS was the Hospitality Committee Chairperson until she left the state; someone was now needed to step in and get some flowers/cards up to the infirmed. Cathi Moody KL7NR volunteered to get the job done.

Yours truly provided a brief discourse on the Club Jacket Procurement Program. Orders are being kept open until the December club meeting. Another list was passed around the room for those interested to sign up. Flannel-lined (lightweight) jackets are \$28, pile-lined (heavier-weight) will be \$33. All jackets will have the club logotype screened on the back of the jacket in yellow (the jacket will be blue). Thanks were given to N2COD for doing a super job on the master for the logotype screen.

Bob Mckinnie AL7AW had in hand the slugs for the BY1PK wattmeter. He gave them to the club secretary for transmittal to Beijing.

Doug Dickinson KL7IKX gave a brief VHF Committee Report. He told us that the local FCC District Office has requested help from the hams in DF-ing HF RFI. Doug pleaded with us not to kerchunk the 94 machine -- it's not good for the hybrid power supply, notwithstanding the fact that kerchunkers invariably fail to ID and thereby don't live up to the requirements of Part 97. 90/30 remains QRP until the amplifier comes back from the factory.

J. A. D. Delancy K1ZAT/NL7 emitted a truncated Membership Committee Report. We gained one new club member over last month's tally, giving us a total of 386. There are 142 AARC Life Members, and 245 ARRL members. Our ARRL/AARC ratio is presently at 63.64%.

Roger Hansen KL7HFQ, VEC Mogul, told us that the VEC will administer an exam on Wednesday, November 6, at 1830L, at the Boy's Club. Work is still progressing on the Boy's Club station.

Bob AL7AW announced that the club had received a Certificate of Appreciation from the ACC Arts Fair Director for its participation in the 1985 event. The certificate was circulated amongst those attending for their perusal.

Lance said that the club had received a plaque from the Nunaka Valley Little League thanking the club for its sponsorship this past year. He read the transmittal letter and circulated the plaque for the members to see.

Mary Laws NL7DM presented Kay McKinnie with a gift to thank her for her help with the administrative matters of club meetings over the past years. The McKinnies are leaving for W5-land shortly.

Past President Daniel Stevens KL7WM gave an ARRL Section Manager Report on behalf of brother David KL7EB. Alaska Section ARRL Members will soon know the results of the balloting for the next Section Manager term. With all the recent departures of club superstars, there are now some vacant League appointments which need to be filled, namely: Emergency Coordinator (EC) for Anchorage (vice Erv Edge AL7CN); District Emergency Coordinator (DEC) for Southcentral Alaska (vice Bob McKinnie AL7AW); and Section Emergency Coordinator (SEC) for the Alaska Section (vice Martha Neeley KL7QS).

Lance gave those attending a brief overview of the Budget Review Committee Report. If anyone has any input on the fiscal matters of the club, they should let an officer(s) know.

Tom Choate KL7JA told us that effective January 1, 1986, UAA will levy charges on the use of its facilities by groups like the AARC. Loosely translated, we may not get free use of the Cuddy Center for our club meetings. However, he understood that there will probably be a waiver process for community service groups that would exempt them from having to pay. Our good public service record, coupled with our Arts Fair help and our UAA scholarships, may put us in good standing for an exemption. Tom will try to get more info for us.

Door prizes were given out. Then we had a break. Then there were more door prizes.

Then Jack Cervantes gave his presentation.

Then there were more door prizes. Then the meeting adjourned at 2039L.

Respectfully submitted,



David B. Epstein KL7LO
Secretary



12 November 1985

VHF REPORT FOR NOVEMBER 85

Well lets see top story in the VHF news this month, is probably the fact the club locker now has a new door, this will help insure that what's ours stays ours. With the professional services of one of our fine club members, KL7IZZ and with the help of his XYL KL7HO (who donated the lock) we now have a locked door. If you need access to the club locker for whatever reason, contact the club president (AL7BK) for the keys. Thanks for your help.

Work slowly continues on the solid state replacement for the 94 machine.. I managed to get all of 10 watts out of the 100 watt amp. This is progress, since we only had the power of the driver (250mw) to begin with. Maybe if I get lucky, we'll have it ready to install by early December.

Meanwhile, the noise bothering 94 dissapeared for awhile, but has come back to haunt us, for that reason we are running with the main receiver squelch very tight, and have to turn off the main receiver when the noise gets too bad. What does this means to the average user? Well, it means you are going to have to run more than 100mw and a rubber ducky if you wish to use the repeater. The single remote receiver does a fine job, but for those folks mobile, especially in South Anchorage, you need more signal than the 100mw and a rubber ducky to get into the remote, or the main when the squelch is tightned up.

Work continues on the new Seward Repeater, KV9D (George) is devoting most of his spare time to finishing up this project.

Work on the KL7EM/R continues, Russ is hoping to get back to the mountain later this month. Meanwhile he hopes to put the repeater on from his house, for "burn-in tests". Russ still has plenty to do, and all volunteers will be greatly appreciated.

We're still awaiting the return of the power amp for the 147.90/30 repeater. Until it returns we are still running what most would call QRP. (thats low power for those not familiar with the "buzz" words of amateur radio). We certainly hope that the power amp returns soon, and of course that will mean a trip to the mountain to re-install it, so stay tuned for the call to help.

Word from the Bristol Amateur Radio Frat is that the transmitter on 94 is up and running, they are awaiting the receiver crystal for 146.340. The final control circuits are being worked on, and soon there should be a 146.34/94 repeater on in Dillingham, serving that community and others in the area. This may give the bootleggers fits, (too bad) maybe the'll get the idea that someone does use these frequency's and go somewhere else to break the law! I've sent several ideas down to the group as to how to allow valid users to use the repeater, and keep the bootleggers off the repeater at least.

On the HF interference signals, I have spent a fair amount of time on the road in the last several weekends, in between work, trying to get a fix. Remember finding the signal source the first time with one trip happens only in the movies. What really happens is you drive, stop, take a directional fix, (if you can hear the signals), log your findings, then move across town, and try to get another fix, eventually the hope is that with enough data, you can plot out on a map, and the cross lines will be where the problem is coming from. At least thats how it's supposed to work, so far the "leg work" is still in progress, and it's far too early to be sure of the results. I have borrowed a fairly large loop antenna, and have been using a FIM-41 field strength monitor, and have a small but growing number of entries in the log book. Work continues on this project.

Hope to see all of you at the Christmas party, the first Friday in December, watch out for Jay he's liable to make you just dissovle into (laughter.....).

Finally our prayers are with Al Andrus (KL7EF) and his family for Al's Wife's recovery.

Doug
73's Doug KL7IKX



Pacific North Realty

Huffman & Old Seward Highway
12350 Industry Way
Anchorage, Alaska 99515
Phone (907) 345-1444

Home: 346-2900

When you need to buy or sell a house, cabin site or other property, contact a HAM, call Fred KL7HM. No flash, just good honest service. 73

Fred

FRED TOLIVER

KL7HM

HAMMING IT UP IN THE KITCHEN ...with NL7DF

Received from Hawaii! . . . "Aloha Bonnie! These are not my own original recipes, but thought they may be of interest anyway. - Ray Beik, Hawaii West Amateur Radio Society."

Thanks, Ray! I love getting contributions to this column.

BANANA CHIFFON CAKE

2 1/4 cups sifted cake flour
1 1/2 cups sugar
1 T. baking powder
1 t. salt
3/4 c. oil
5 egg yolks
1 cup mashed bananas
8 egg whites
1/2 t. cream of tartar

Sift together first 4 ingredients. Add in order, oil, egg yolks, & bananas. Mix well. Beat whites & cream of tartar til very stiff. Pour egg yolk batter over whites; fold in. Pour into ungreased 10 inch tube pan. Bake 325 for 55-60 min. Invert & cool completely. Remove from pan.



GLAZED BANANAS

Peel ripe bananas and dip in lemon juice. Roll in sugar & saute slowly in butter til tender, turning to brown evenly. Serve hot, as a vegetable. (a VEGETABLE, Ray??)

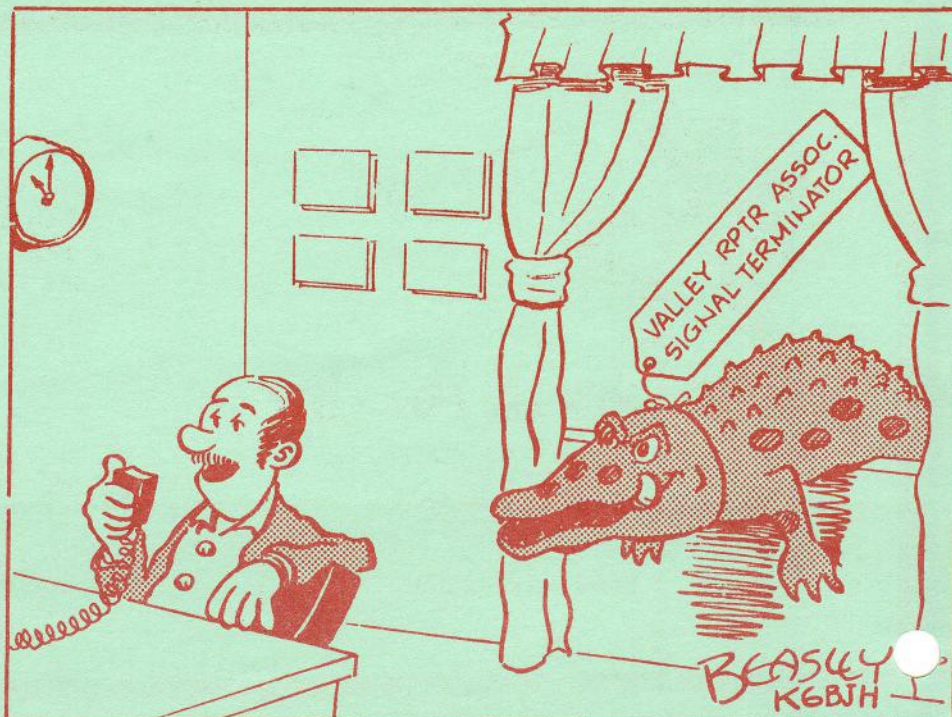
KEEP COOKIN'



BANANA CHIPS

Peel half ripe bananas & slice very thin. Spread on towel & dust very lightly w/flour.

Deep fat fry in 350 degree oil. Chips should be a delicate brown. Drain on absorbent paper & sprinkle w/ salt.



WHAT DO YOU REPEATER GUYS MEAN WHEN YOU SAY, "THE ALLIGATOR'LL GETCHA?"

*  IT'S LIKE A MIRACLE! *
* FOR 100% HASSLE FREE *
* OUT-OF-STATE CHRIST- *
* MAS GIFTS CALL ME! *
* BONNIE JENNINGS - 243-1146 *

Amateur radio is life itself to KH6BIH, and to us his story is a reminder to be thankful for the tapping of the keyer and the hum of the mic.

The Overcoming Ham

BY LEWIS H. STRAUSS*, AH6I/W3

Did you feel more than a little nervous when you walked into the FCC office to take an exam? Did your hand shake a little as you signed your name to the test? Dave Fraser, KH6BIH, never had those problems. He lost his eyesight as a child, and has never been able to go to an FCC office.

"Big deal," you say. "There are plenty of blind hams; I've talked to quite a few." You're right, of course. But, you can't talk to Dave; he's also deaf. Further, his body is virtually rigid except for the movement of his breathing, chest, and throat muscles. To make matters worse, his joints are locked, and he hasn't had any significant movement in his arms, legs, or even his head since he was a teenager, some 33 years ago.

"Well, then," you say, "surely this OM who is deaf, blind, and immobilized isn't on the air anymore. Right?" Wrong! Dave is on the air every day, and he is fully informed of local, national, and world events. He's even up to date on the comic strips.

Ham radio, as a hobby, is a "forest" of opportunity and possibility, and we are all acquainted with the various "animals"

that inhabit this forest: the DXer, the Rag-chewer, the Traffic Passer, the One-Upsmanship, and so forth. But for Dave, ham radio is *Life, The Only Game In Town*, and his single contact with the world outside his home. None of this would have been possible, however, if it wasn't for Dave's 84-year-old father, David M. Fraser. The elder Mr. Fraser was a "sparks" in the British Navy in World War I, and so for fun, when Dave was a child, he taught young Dave the code. As Dave's senses began to fail when he was a teenager, his parents persuaded him to study amateur radio, and he was able to learn enough to pass the Advanced examination before his physical disabilities closed in.

Having a hobby poses severe problems for anyone as disabled as Dave. When not in bed, Dave "sits" in a wheelchair with a back support, leaning 45° to the rear, his arms on rests. In this position, anyone who knows c.w. can "talk" with Dave by tapping in code on his arm. For those who do not know code, there is a modified typewriter called a Tellatouch, which can be placed on a small pallet in front of Dave. When a key is depressed, the appropriate members of a group of wires are extended, and the tips of these wires can be felt and read as a Braille letter by Dave whose fingertip is inserted in

a small hole in the back of the Tellatouch. Dave cannot read Braille in the conventional way blind people do because he cannot move his hand across a page. Dave's fingers are only about one-half the size of those of a normal adult and are much distorted from his illness. Yet, he still has remarkable sensitivity in the fingertips, and this is what enables him to use the Tellatouch.

Just after lunch every day Dave is moved to his rig. The transceiver is crystal-controlled in the 20 meter c.w. band, and his three-element Mosley TA33 is pointed permanently at the U.S. mainland from his home in Capt. Cook on the island of Hawaii. The rig has been modified by a friendly technician, who adjusted the offset of the audio so that a normal 600-1000 Hz tone is reduced to about a 50 Hz buzz. The speaker rests uncovered, face up, on the table so that Dave can copy code by placing his finger on the speaker cone. Dave's other hand is placed on his keyer. The same chest muscles that allow him to breathe and to speak allow him enough movement to operate the keyer, even though he has no movement in his arms, wrists, or fingers. And can he go! Dave can send and receive code at the rate of 20 w.p.m., with ease! And if you don't think that's an accomplishment, try sending with your shoulder, elbow, wrist, and finger joints locked, using only your chest muscles! Try copying 20 w.p.m. through your fingertips! Dave's a pretty good rag-chewer, and his replies are usually filled with gentle humor. That's why we call Dave "The Overcoming Ham."

Two mainland hams, W8MH and W9TDB, work Dave nearly every day, and they keep him informed on all manner of subjects, ranging from the comics to heavy politics. I work him ground wave from my new home 15 miles from Dave and also attempt to reach him when I am /W3. It doesn't take long to learn that Dave is far better informed than the average citizen, and that he never forgets anything you tell him. A couple of times I have given him some data and a year later slightly different data on the same subject, and he always reminds me of the difference. When President Reagan was shot, I called Dave's housekeeper and urgently asked that Dave be pushed to his rig. Once he was in place, I gave him a few paragraphs on the shooting. At the end of my transmission I asked whether he had copied the message, and Dave then proceeded to repeat the 10-minute message verbatim. Such is the memory of a man who, for 33 years, has seen nothing and who, for 13 years, has heard nothing.

So with all the negatives one sometimes hears about ham radio, it is reassuring to think that it really is important, worthwhile, and to some people like Dave, absolutely necessary for life. And, it reminds us to QRL so as not to jump on his frequency.

*1015 Eighteenth Street, N.W., Washington, D.C. 20036

GREAT DISCOVERIES IN ELECTRONICS

Electronics had its beginning in 1745 when Professor Pieter van Musschenbroek discovered the capacitor while trying to "electrify" water in his Leyden jar, which stored a charge, proving to be more useful and convenient to experimentors than a direct charge from a friction machine. 18th century scientists reasoned that the electricity was condensed in the jar, from which comes our word condenser. Today, capacitor is preferred by most people.

80 years elapsed before the volt, the ampere, the ohm, and the farad were described. Yet without identifying the underlying fundamentals of electricity, these giants of the early age of electronics were able to define its principles.

Alessandro Volta sometimes judged a battery by the flash he saw as he touched its wires to his eyelids. His battery was called a "Voltaic Pile" and consisted of two stacks of paired zinc and silver discs packed between layers of brine soaked pasteboard. When columns were connected at the top, current flowed between them, arising from chemical reaction of the paired metals.

Andre Marie Ampere—"The Newton of Electricity"—was first to describe current as the flow of electricity along a wire. He showed that when current flowed through a suspended rectangular wire loop, the loop became magnetized, and acted like a compass needle, rotating to point north. With Hans Oersted, Ampere formulated the laws of electromagnetism in the 1820's.

In 1827, George Simon Ohm's rule of resistance was published. He showed that current depended on the resistance of the wire circuit it flowed through: current varies in direct ratio to the force of the battery and inversely to the wire's resistance. Ohm's source of electricity was not actually a battery, but a set of Leyden jars connected by brass rods.

In 1831, Michael Faraday and Joseph Henry independently discovered that voltage is induced in a conductor as a result of a magnetic field varying in respect to the conductor. Since the varying field could be

developed by varying the current flowing in a second conductor magnetically linked to the first, this led to the development of the transformer. In addition to his discoveries in electromagnetism, Michael Faraday determined the characteristics of capacitors. In his honor, the unit of capacitance measurement was named the Farad.

In 1876, the brilliant James Clerk Maxwell formulated sets of equations which unified into one cohesive theory the findings of his predecessors, laying the foundation for the practical use of electric power--and ultimately, for the emergence of the electronics industry.

Nikola Tesla (1857-1943), inventor and developer of the AC principle of electric power generation. If DC had become the standard for commercial power, the design of nearly all electrical equipment would have been enormously more complicated and costly.

Edison discovered that by introducing a second element in his incandescent bulb, an electric current would flow through a vacuum and be rectified. Except for Galena crystals and electromechanical commutators, this was the first rectifier.

The amplifier made progress in electronics possible. American scientist Lee De Forest patented a triode amplifying tube that was called the audion. He invented the triode by inserting a third element in the tube. After studying the effects of this new device, he and others developed circuits comprised of resistors, inductors and capacitors in which to use it.

The transistor was invented by John Bardeen, Walter Brattain, and William Schockley. Compared to vacuum tubes, transistors are more efficient, lighter, more reliable, and run cooler. There is no delay in warming up, and they produce very little heat.

Other giant steps in the evolution toward miniaturization were printed circuits, in which solid wire connections and tubes were replaced by printed connections on a flat circuit board, and integrated circuits which were born in 1958. They allowed the shrinking of circuitry, reduced component count, and increased reliability.

HERE FOR YOUR AMUSEMENT, ARE SOME ACTUAL SAMPLES OF PEOPLE'S EXPLANATIONS OF THEIR ACCIDENTS - TAKEN FROM ACCIDENT REPORTS:

I had been learning to drive with power steering. I turned the wheel to what I thought was enough & found myself in a different direction going the opposite way.

To avoid hitting the bumper of the car in front, I struck the pedestrian.

When I saw I could not avoid a collision, I stepped on the gas and crashed into the other car.

The accident occurred when I was attempting to bring my car out of a skid by steering it into the other vehicle.

The accident happened when the right front door of a car came around the corner without signaling.

I saw her look at me twice. She appeared to be making slow progress when we met on impact.

No one was to blame for the accident but it never would have happened if the other driver had been alert!



FOR SALE:

YAESU FT-901 DM. LIKE NEW
W/SERVICE MANUAL.

.....\$550.00

TRS 80 MODEL 1 - LEVEL II
48K W/DOUGLE DENSITY CONT
BOARD W/EXPANSION INTER-
FACE. NO DISC DRIVE.

.....\$300.00

FOR THESE GREAT ITEMS,
CALL:

KEN GREEN
KL7JAI
243-2576



JENNINGS CONSTRUCTION
8035 LLOYD DRIVE
ANCHORAGE, ALASKA 99502

243-1146



LICENSED, BONDED & INSURED
LOCAL REFERENCES - 30 YRS. EXP.
FROM FOUNDATIONS TO FINISH
INCLUDING PLUMBING & ELECTRICAL

REMODELING WELCOME - FREE ESTIMATES

PERSONAL COMPUTING ALASKA

Nov. 85

APPLE



Accessories

CHECKMATE TECHNOLOGY
APPLIED ENGINEERING
PRACTICAL PERIPHERALS
KRAFT
AST
INDEX
KODAK
MICROSOFT
ORANGE MICRO
QUADRAM
TECHMAR
TIT
INDEX
OFFICE TECHNOLOGY
HERCULES

CALL
345-3167

HAYES
PROTHEUS
MICROSCI
HABA
RIKON

MANY OTHERS CALL 345-3167

MACINTOSH

C-64

Arrays/Continental, Home Acct.....\$74.97	Adison-Wesley, Hobbit.....\$28.96
Broderbund, Lode Runner.....\$31.97	Batteries Included, Paperclip WP.....\$66.97
Borland, Sidekick.....\$65.97	Broderbund, Bank Street Writer.....\$37.97
C.S.D. MacTron.....\$254.40	Lode Runner.....\$28.97
Creighton dev., MacSpell.....\$69.95	Print Shop.....\$34.97
Davidson/Assoc. Spell Reader II.....\$51.97	Karateka.....\$25.97
Dow Jones Mktng Mgr. Plus.....\$153.40	CBS Software, S.A.T.....\$60.97
Electronics Art, Ultima III.....\$45.00	Davidson Assoc. Math Blaster.....\$37.97
Delux Music Constr set.....\$38.00	Word Attack.....\$37.97
Financial Cookbook.....\$38.00	Spell II.....\$37.97
EPX, Winter Games.....\$32.00	Spell Reader II.....\$49.97
Hayden, Hayden Speller.....\$60.97	Electronics Arts, Ultima III.....\$38.00
Holy Grail.....\$38.97	Baird's Tail.....\$32.00
Ensemble.....\$205.00	Cut & Paste WP.....\$22.00
Sargon III.....\$38.97	Skyfox.....\$28.00
Hayes, Smartcom II.....\$121.85	Archeon.....\$22.00
Human Edge, Mind Prober.....\$37.97	Seven Cities of Gold.....\$28.00
Infocom, Hitchhikers Guide.....\$31.97	EPYX, Summer Games I.....\$32.00
Zork I.....\$31.97	Winter Games.....\$32.00
Suspect.....\$34.97	Human Edge, Mind Prober.....\$28.97
Wishbringer.....\$31.97	Infocom, Hitchhiker's Guide.....\$28.97
ODS, Inc., ODS Consultant.....\$175.00	Infocom, Wishbringer.....\$28.97
Origin, Ultima II.....\$44.00	Microprose, F-15 Strike Eagle.....\$28.97
Ultima IV.....\$44.00	AcroJet.....\$28.97
Living Videotext, Think Tank.....\$172.00	Silent Service.....\$28.97
Lotus, Jazz.....\$267.00	Origin Syst. Ultima III.....\$43.00
Lotus, Jazz.....\$267.00	Software Pub., PFS: File.....\$64.97
Megaform.....\$197.00	Spinnaker, Kids on Keys.....\$22.97
Microsoft, Microsoft Word.....\$137.00	Kidwriter.....\$24.97
Microsoft Multiplan.....\$137.00	Springboard, Early Games for Young Children.....\$28.97
Microsoft File.....\$137.00	E.G. Piece of Cake.....\$28.97
Microsoft Charts.....\$137.00	
Logo.....\$89.97	
Excel.....\$267.00	
Microsoft Logo.....\$84.97	
Miles, Hack the Knife.....\$31.97	
Harrier Strike.....\$37.97	
Monogram, Dollars & Sense.....\$104.97	
Odesta, Helix.....\$247.50	
Peachtree, General Ledger.....\$121.25	
Accounts Payable.....\$121.25	
Accounts Receivable.....\$121.25	
Sierra on-line, Champ Boxing.....\$31.97	
Ultima II.....\$43.97	
Simon & Schu, Typing Tutor III.....\$43.97	
Spectrum Holobyte, Gato.....\$37.97	
T/Naker, Click Art.....\$37.97	

Prices subject to change without notice.

MORE TITLES AVAILABLE. CALL FOR

CURRENT INFORMATION AND PRICE..

Grappler Plus \$95.00

Preview #266

Hercules
color card
\$154

Checkmate
Zee 80A
\$79.00

MultiRam IIe/64K
\$147.00

AE
Viewmaster 80
\$129.00



Activision.....\$47	Call
Addison-Wesley, Hobbit.....\$32.50	
Advanced Logic Sys, Word Handler.....\$51.00	
Arrays/Cont., Home Acct.....\$57.95	
Tan Advantage.....\$54.97	
Aston-Tate, dBase II (free 2-80).....\$32.00	
Avant-Garde.....\$54.97	
Barron's, Study for S.A.T.....\$68.97	
Beagle Brothers.....\$54.97	
Bluechip, Baron, Tycoon, Squire, etc.....\$31.97	
Borland, Turbo Tutor.....\$142.00	
Turbo Pascal.....\$54.97	
Broderbund, Print Shop.....\$39.97	
Karateka, Load Runner.....\$28.97	
Bank Street Writer, Filter, etc.....\$55.97	
other programs available.....\$55.97	
CBS Software, S.A.T.....\$74.97	
Central Point, Copy II.....\$30.00	
CompuLink, SuperCalc 3.....\$142.00	
DataSoft, Zaxxon.....\$28.97	
Coman.....\$31.97	
Data Transforms, Ponderix.....\$69.00	
Davidson & Assoc., Math Blaster.....\$35.97	
Spell II, Word Attack.....\$35.97	
Spell Reader.....\$54.97	
EduWare, Algebra I.....\$31.97	
Electronics Art, Bard's Tail.....\$40.00	
Archeon II, Skyfox.....\$32.00	
Adventure Construction set.....\$43.00	
Fisher-Price, Alpha Build.....\$19.50	
Sea Speller, Up & Add Em.....\$19.50	
EPYX, Summer Games II.....\$32.00	
Winter Games.....\$32.00	
Funk Software, Sideways.....\$46.00	
Hayden, Sargon III.....\$37.97	
Human Edge, Mind Prober.....\$37.97	
Infocom, Hitchhikers Guide.....\$31.97	
Zork I, Wishbringer.....\$31.97	
Learning Company, Reader Rabbit.....\$31.97	
Living Videotext, Think Tank.....\$105.00	
Meca, Managing your Money II.....\$144.97	
Micropro [Int], WordStar (c/w).....\$219.50	
Microprose, F-15 Strike Eagle.....\$28.97	
Microsoft, Microsoft Multiplan.....\$142.00	
Microstuf, Crosstalk (2-80).....\$135.00	
Monogram, Dollars & Sense.....\$75.00	
Origin Systems, Ultima III.....\$46.00	
Ultima IV.....\$49.00	

Pennuini Soft., Cat Graphics.....\$28.97
Pin Point, Pinpoint (file only).....\$54.50
Quinset, Family Roots.....\$165.00
Satellite Soft., Word Perfect.....\$104.50
Sega, Spy Hunter.....\$37.97
Super Zaxxon.....\$28.97
Simon & Schu, Webster spell ck.....\$42.97
Sir-Tech Software, Wizardry.....\$42.97
Software Publishing, PFS Write.....\$89.95
PFS File, PFS Reports.....\$89.95
PFS Graph, PFS Plan.....\$89.95
Spectrum Holobyte, Gato.....\$31.97
Springboard, Newsroom.....\$42.97
Clip Art.....\$25.97
E.G. for Young Children.....\$28.97
E.G. Piece of Cake Math.....\$28.97
United SWI, ASCII Express.....\$95.97
Weekly Reader, Sticky Bear all.....\$31.97

AMIGA

Electronics Art, Archeon.....\$32.00
Arcticfox.....\$32.00
Delux Paint.....\$58.00
Dr. J & Larry Bird 1 on 1.....\$32.00
Financial Cook Book.....\$39.00
Seven Cities of Gold.....\$32.00
Skyfox.....\$32.00
Infocom, Suspect.....\$31.97
Hitchhikers Guide.....\$31.97
Wishbringer.....\$31.97
Zork I.....\$31.97
Zork II or III.....\$34.97
Sorcerer.....\$34.97
Suspended.....\$37.97
Witness.....\$31.97
Wind Forever Voyaging.....\$34.97
Cutthroat.....\$31.97
Dealtime.....\$37.97
Enchanter.....\$31.97
Infidel.....\$34.97
Planetfall.....\$31.97
Seastalker.....\$31.00
Starcross.....\$37.97
Softlab, VFP Professional.....\$104.97

ATARI

Arrays Cont., Tan Advantage.....\$48.97
Broderbund, Lode Runner.....\$28.97
Print Shop.....\$34.97
Bank Street Writer.....\$49.97
Electronics Art, Archeon.....\$32.00
Archeon II.....\$32.00
Financial Cookbook.....\$32.00
Ultima II.....\$38.00
EPYX, Summer Games.....\$32.00
Infocom, Hitchhiker's Guide.....\$28.97
Wishbringer.....\$28.97
Zork I or II.....\$31.00
Sorcerer.....\$31.97
Microprose, F-15 Strike Eagle.....\$28.97
Origin Syst., Ultima III.....\$42.99
Sierra on-line, Ultima.....\$26.97
Strategic Simulations.....\$47.97
Sublogic, Flight Simulator III.....\$40.97

We will place
you on our mail
list if you give
us your address
when you call.

ANCHORAGE AMATEUR RADIO CLUB, INC.

Post Office Box 101987
Anchorage, Alaska 99510-1987
Address Correction Requested

! BULK RATE !
! U.S. POSTAGE!
! PAID !
! Anchorage, AK!
! Permit 223 !

RICHARD L STEWART
3858 CARAVELLE DR
ANCHORAGE, AK 99502

NEO LIFE
A NEW LIFE WITH NEO LIFE

William & Eleanor Reiter
Family Health Consultants

P.O. Box 145-EAFB, Anchorage, Alaska 99506

(907) 337-1779

Natural Organic Vitamin & Mineral Supplements
Protein Products • Weight Control
Nutriance Natural Beauty Care
NEST Dehydrated Foods
Biodegradable Cleaners • Waterless Cookware
Exercise Equipment • Dental Care
Air & Water Purification Systems

Wholesale • Retail

CLIP HERE

ANCHORAGE AMATEUR RADIO CLUB, INC. * P. O. BOX 10-1987 * ANCHORAGE, AK 99510-1987

DUE 2-28-86

NAME _____ CALL SIGN _____

ADDRESS _____ LICENSE CLASS _____

CITY _____ STATE _____ ZIP _____ LICENSE EXPIRATION _____

PHONES: HOME _____ BUSINESS _____ ARRL MEMBER? YES _____ NO _____ LIFE _____

YOUR STATION CAPABILITIES: HF _____ VHF _____ UHF _____ MOBILE HF _____ MOBILE VHF _____

AMSAT/OSCAR _____ RTTY _____ OTHER _____

Do you have other special interests in Amateur Radio? MICROPROCESSOR/DIGITAL _____

TRANSMITTER HUNTS _____ FIELD DAY _____ FLEA MARKET _____ OTHER _____

NOTE: Membership period is from January to January, the grace date being the first regular meeting in February. Dues shall be prorated on a quarterly basis for new members.

DUES: \$12.00 per single member
\$15.00 per member and spouse
\$5.00 per full-time student

\$150.00 Life member (may be paid in installments)



MEMBERSHIP APPLICATION